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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,209

06/29/2006

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EXAMINER

THOMAS, ALEXANDER S

ART UNIT

PAPER NUMBER

1794

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,209	Applicant(s) TSUNETSUGU ET AL.	
	Examiner Alexander Thomas	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 17 and 22-35 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15, 17 and 32-35 is/are allowed.
- 6) ☒ Claim(s) 22-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 22-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The changes to claim 22 make the scope of this claim indefinite. It is unclear whether the claim is directed to a heat insulator per se or the combination of a heat insulator and heat source. Lines 1-3 of the claim imply that a heat insulator per se is being claimed in view of the phrase "A vacuum heat insulator for use with a heat source". However, the last two lines of claim 22 are directed to the combination of a heat insulator and a heat source in view of the phrase "said heat-insulating surface which faces said heat source". Thus, the scope of claim 22 is unclear.

2. Claims 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynne 5,900,299 in view of JP 2001-141179 and JP 2001-265138. The primary reference discloses a vacuum heat insulator comprising a core material covered with an enveloping laminate that comprises an inner heat sealable layer and barrier layers wherein the enveloping laminate is folded onto one side of the insulator; see Figure 1 and column 2, lines 58-67. The secondary references each disclose vacuum insulators with similar structure to that of the primary reference wherein the heat source to be insulated has a temperature of approximately 100 degrees C ('179) and 200 degrees C ('138). It would have been obvious to one of ordinary skill in the art to use the product of the primary reference to insulate a heat source between 100 and 200 degrees C in view

Art Unit: 1794

of the secondary references which show the use of vacuum insulators with such heat sources. It would also have been obvious to one of ordinary skill in the art select a heat sealable material for the product of the primary reference with a melting temperature above the intended use temperature of 200 C in order to prevent destruction of the envelope laminate. Likewise, it would have been obvious to one of ordinary skill in the art to select known materials for the various other layers of the envelope laminate compatible with the temperature of the heat source since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (claims 23-29).

Concerning the presence of a fin in the insulator, it would have been obvious to one of ordinary skill in the art to provide same in the product of the primary reference in view of the teaching in the secondary reference ('179) of a fin (see Figure 1) to provide additional structural integrity. It would also have been obvious to one of ordinary skill in the art to place the fold of the enveloping laminate, i.e. the fin, on the low temperature side of the insulator when in place next to the heat source since this is the logically the more heat sensitive point of the envelope.

3. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynne 5,900,299 in view of JP 2001-141179 and JP 2001-265138 as applied to claims 22-29 above, and further in view of Japanese patent document 107427/1990 (Laid open No. 64089/1992). Japanese patent document 107427/1990 discloses providing a cover member 7 for protecting the heat seal layers at the end face of an envelope used to cover a vacuum insulator core; see Figure 2. It would have been

Art Unit: 1794

obvious to one of ordinary skill in the art to provide a cover layer over the heat sealable layers at the end face of the envelope in the product of the combined prior art in view of the teaching in Japanese patent document 107427/1990 in order to provide heat protection to the heat seal layers.

Allowable Subject Matter

4. Claims 15, 17 and 32-35 are allowed.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Thomas whose telephone number is 571-272-1502. The examiner can normally be reached on 6:30-4:00 M-THUR.

Art Unit: 1794

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Thomas/
Primary Examiner
Art Unit 1794